

### **REMARKS**

Claims 1-9 and 15-17 are pending in the application. Claims 10-14 have been withdrawn. Claims 15-17 are new.

### **Objections to the Specification**

Claim 2 was objected to due to an informality. Claim 2 has been amended to correct the informality, and therefore is believed allowable.

### **Claim Rejections - 35 U.S.C. § 103(a)**

The Patent Office rejected claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over US Szczutkowski (US Patent No. 5,051,991) in view of US Patent 6,262,678 to Sarpeshkar. Applicant respectfully traverses the rejection of Claims 1-9. Applicant submits that a *prima facie* case of obviousness has not been established with regard to claims 1-9. Obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Thus, the Examiner may not use the patent application as a basis for the motivation to combine or modify the prior art to arrive at the claimed invention.

There is no teaching or suggestion in either Szczutkowski or Sarpeshkar, and therefore no motivation to combine the two to create the invention disclosed in the present application. Szczutkowski teaches a repeater, a sub-band coder/decoder wherein means for separately coding the input digital signals in each sub-band channel for separately decoding the time delayed signals. Sarpeshkar teaches spike accumulation in the form of a recursive application of alternate upcounting and downcounting operations yielding

successively finer quantization estimates that are terminated by an error-correction operation.

Additionally, the Patent Office's suggested combination of Szczutkowski and Sarpeshkar would render Sarpeshkar inoperative for its intended purpose because the present invention does not accumulate spike bursts. Rather, the application discloses real time transmission of coded output data for conversion into spike bursts to increase data transmission without increasing bandwidth. Therefore, obviousness has not been established with respect to claim 1 because there is no suggestion or incentive to combine Sarpeshkar with Szczutkowski, and claim 1 is believed allowable. Claims 2-9 depend from claim 1 and are thus believed allowable because of their dependence on an allowable independent claim.

Independent claim 15 has been added to further define the invention of the present application. Applicant respectfully submits that a *prima facie* case of obviousness may not be established with regard to new independent Claim 15. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). *See also In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970). Szczutkowski discloses a transceiver for sending and receiving digital control and cryptographically encoded digital data signals over a communication channel. The Examiner is correct in stating that Szczutkowski does not disclose a spike burster converting input signal into spike burst and out into an output signal corresponding to input signal. Sarpeshkar discloses a downcounting circuit for accumulation of spikes to achieve finer quantization estimates.

The invention of the present application does not accumulate spike bursts. Rather, the application discloses real time transmission of coded output data for conversion into spike bursts to increase data transmission without increasing bandwidth. Applicant submits that neither Szczutkowski nor Sarpeshkar teach, disclose, or suggest real time transmission of a coded output

signal for conversion into a spike burst. Accordingly, under *In re Ryoka*, a *prima facie* case of obviousness has not been established, and Claim 15 is thus believed allowable. Claims 16 and 17 depend from Claim 15 and are believed allowable due to their dependence on an allowable independent claim.

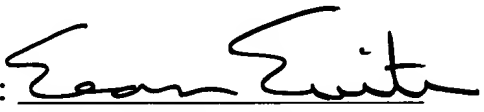
**CONCLUSION**

The application is respectfully submitted to be in condition for allowance. Accordingly, notification to that effect is earnestly solicited. In the event that issues arise in the application that may readily be resolved via telephone, the Examiner is kindly invited to contact the undersigned Attorney at (402) 496-0300.

Respectfully submitted,

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